Bellwork: 11/9/12

$y - y_1 = m(x - x_1)$

Find the equation of a line that goes through the point (-4,9) and is perpendicular to 2x-5y=15.

$2x - 5y = 15$

$-2x \qquad -2x$

$-5y = -2x + 15$

$\frac{-5y}{-5} = \frac{-2x}{-5} + \frac{15}{-5}$

$y = \frac{2}{5}x - 3$

$m_{\perp} = -\frac{5}{2}$

$y - 9 = -\frac{5}{2}(x + 4)$

$y - 9 = -\frac{5}{2}x - 10$

$+9 \qquad +9$

$y = -\frac{5}{2}x - 1$